(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 21 October 2004 (21.10.2004)

PCT

(10) International Publication Number WO 2004/089545 A1

- (51) International Patent Classification⁷: **B01L 3/00**, B01D 39/04, B01L 7/00, B81B 1/00, C12Q 1/68, G01N 35/00
- (21) International Application Number:

PCT/NZ2004/000057

- (22) International Filing Date: 23 March 2004 (23.03.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

525198 8 April 2003 (08.04.2003) NZ 527519 13 August 2003 (13.08.2003) NZ

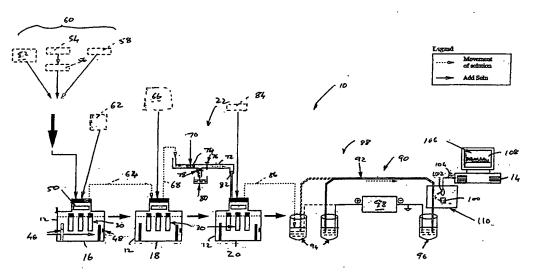
- (71) Applicant (for all designated States except US): AUCK-LAND UNISERVICES LIMITED [NZ/NZ]; Level 10, 70 Symonds Street, Auckland (NZ).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): SADARANGANI, Daksh [NZ/NZ]; c/Auckland Unisevices Limited, Level 10, 70 Symonds Street, Auckland (NZ). MACDONALD, Bruce [NZ/NZ]; c/Auckland Unisevices Limited, Level 10, 70 Symonds Street, Auckland (NZ). CALVERLEY, Paul [NZ/NZ]; c/Auckland Unisevices Limited, Level 10, 70 Symonds Street, Auckland (NZ). RODRIGO, Allen [NZ/NZ]; c/Auckland Unisevices Limited, Level 10, 70 Symonds Street, Auckland (NZ). SAUL, David [NZ/NZ];

c/Auckland Unisevices Limited, Level 10, 70 Symonds Street, Auckland (NZ). BAKER, Scott [NZ/NZ]; c/Auckland Unisevices Limited, Level 10, 70 Symonds Street, Auckland (NZ). PEARSON, Mike [NZ/NZ]; c/Auckland Unisevices Limited, Level 10, 70 Symonds Street, Auckland (NZ).

- (74) Agent: F B RICE & CO; 605 Darling Street, Balmain, NSW 2041 (AU).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: DNA ANALYSIS SYSTEM



(57) Abstract: A DNA analysis system 10 includes a thermal cycler 12 operable as an extraction stage for extracting DNA from a sample to be tested and an as amplification stage for replicating identically a region of interest in DNA strands extracted from the sample. A predetermined proteinase is used in the thermal cycler 12 at least in the extraction stage. A purification stage 22 purifies the amplified material from the thermal cycler 12. An analysis stage 88 analyses the purified sample to obtain genetic information relating to the sample.

WO 2004/089545 A1



Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.